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ABSTRACT

Population changes which have occurred within the black, Anglo, and Spanish surnamed populations in Texas from 1950 to 1970 were analyzed. This 20-year time span was selected because of the availability of the comparable census information for these groups. Three aspects of population dynamics examined were: growth, components of growth, and distribution. Data were taken from several U.S. Census Reports for 1950, 1960, and 1970. Some findings were that: (1) each group experienced an absolute increase in size during this time, with the Spanish surnamed having the largest increase and Anglos and blacks having the least; (2) despite this increase, their sizes relative to one another remained virtually unchanged; (3) the one single factor which accounted for most of the growth and the changes in growth rates was the fluctuations in the number of births; (4) migration was also an important factor affecting the size of the Spanish surnamed, but was of minimal consequence for the black and Anglo populations; (5) throughout the 1950's and 1960's, Texas' population was concentrating more and more in metropolitan areas, especially in the Houston, Dallas, and Fort Worth areas; and (6) the Anglo population increased in the areas outside the central cities while the black and Spanish surnamed populations increased inside the central cities. Some generalizations concerning present and projected population characteristics are also made. A problem encountered in this analysis was the possible undernumeration of the black and Spanish surnamed groups. (NQ)

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A DEMOGRAPHIC PROFILE OF TEXAS AND SELECTED CITIES: SOME RECENT TRENDS, 1950-1970

Submitted to
The Division of Occupational Research and Development
of the
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by

Tatcho Mindiola

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pii blank

INTRODUCTION

The University of Houston, Center for Human Resources, under contract to the Texas Education Agency, Division of Occupational Research and Development, has been involved in examining the educational and training opportunities available to young people throughout the State of Texas. Such an undertaking requires a thorough understanding of the various intertwining relationships inherent in any society. One cannot evaluate occupational training programs in a vacuum. The educational output, the manpower ramifications of that output, and the population characteristics and shifts are a few of the factors that have to be given serious consideration.

This report, A Demographic Profile of Texas and Selected Cities: Some Recent Trends, 1950-1970, analyzes population changes over a twenty-year span and makes some generalizations concerning present and projected population characteristics. Three aspects of population dynamics are discussed: population growth, population concentration, and components of population growth. Special emphasis is placed on the minority populations in the State, particularly the difficulties encountered in enumerating the Spanish surnamed population.

Other reports in this series include Black Youth and Occupational Education in Texas; Occupational Education in Texas: An Ethnic Comparison; and Manpower and Vocational Education in Texas. Another publication, Occupational Education in Texas: Summary and Conclusions discusses the findings and implications of the total study.

p iv blank

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iii
INTRODUCTION	v
LIST OF TABLES	ix
LIST OF MAPS	xi
A DEMOGRAPHIC PROFILE OF TEXAS AND SELECTED CITIES: SOME RECENT TRENDS	1
Population Growth	2
Components of Population Change	7
The 1950-1960 Decade	7
The 1960-1970 Decade	17
Fertility Behavior	25
Population Concentration	28
Summary	46
REFERENCES	53

vi blank

LIST OF TABLES

Table		Page
1.	Spanish Origin of Respondents With Spanish Surnames, Texas, 1970.	3
2.	Population Growth in Texas by Ethnic and/or Racial Groups, 1950-1970	4
3.	Spanish Surnamed Population of Texas by Nativity and Parentage, 1950-1970.	6
4.	Estimating the Components of Growth for the Total Population of Texas, 1950-1960	8
5.	Estimated Components of Growth of the Spanish Surnamed Population of Texas, 1950-1960.	10
6.	Estimating the Components of Growth of the Black Population of Texas, 1950-1960	13
7.	Estimating the Components of Growth of Other Races in Texas, 1950-1960.	15
8.	Estimating the Components of Growth of the White Population of Texas, 1950-1960	16
9.	Estimating the Component of Growth for the Total Population of Texas, 1960-1970	18
10.	Estimating the Components of Growth of the White Population of Texas, 1960-1970	19
11.	Estimating the Components of Growth of the Black Population of Texas, 1960-1970	20
12.	Estimating the Component of Growth of Other Races in Texas, 1960-1970.	21
13.	Estimated Components of Growth of the Spanish Surnamed Population of Texas, 1960-1970.	22
14.	Child-Woman Ratios by Ethnic Group in Texas, 1950-1970.	25

of viii blank

Table		Page
15.	Percent Change in the Number of Children Ever Born Per 1000 Women in Texas by Ethnic Group by Age, 1960 and 1970.	27
16.	Percent of Texas Population Living in Urban and Rural Areas by Ethnic Group, 1950-1970	29
17.	Growth of Population in Metropolitan Areas of Texas by Ethnic Group, 1950-1970	30
18.	Metropolitan Areas in Texas, 1950-1970	31
19.	Growth of Spanish Surnamed Population in Selected Metropolitan Areas of Texas, 1950-1970.	39
20.	Growth of Spanish Surnamed Population in Metropolitan Areas of Houston, Dallas and Fort Worth, 1950-1970.	40
21.	Growth of Black Population in Selected Metropolitan Areas of Texas, 1950-1970.	42
22.	Percent of Metropolitan Population Living in Central Cities of Texas by Ethnic Group, 1950-1970	44
23.	Growth of Metropolitan Population In and Outside of Central Cities of Texas by Ethnic Group, 1950-1970.	45

LIST OF MAPS

Maps

		Page
1.	Standard Metropolitan Statistical Areas, 1970.	33
2.	Population Gain and Loss in Texas, 1950-1960.	34
3.	Population Gain and Loss in Texas, 1960-1970.	35
4.	Counties With Twenty-Five Percent or More of Spanish Surnamed and Black Population, 1970	37

A DEMOGRAPHIC PROFILE OF TEXAS AND SELECTED CITIES: SOME RECENT TRENDS, 1950-1970

The purpose of this report is to document some of the population changes that have occurred within the Black, Anglo, and Spanish-surnamed populations in Texas from 1950 to 1970. This time span was not selected arbitrarily; rather, it was dictated by the availability of comparable census information for all three groups.

It should be stressed that this report is not intended to be a complete documentation of all the important demographic characteristics of the Texas population. Only three aspects of population dynamics are discussed: population growth, components of population growth, and population concentration. One of the problems encountered in this analysis concerned the accuracy of the census information on the Black and Spanish-surnamed groups. In 1970 the Census Bureau estimated that the Black population in the United States was underenumerated by approximately seven percent. No comparable estimate has ever been given by the Census Bureau for the Spanish surnamed even though population experts acknowledge that an undercount exists. The extent of this undercount is still undetermined and remains a subject of considerable controversy because of the political and economic implications on the Spanish surnamed.[1] The undercount estimates range from seven to 30 percent depending on the source. More than likely the estimate is somewhere between ten and 30 percent. However, to the author's knowledge, no independent estimate of Spanish surnamed underenumeration exists in Texas. Therefore, no claim is made that the figures taken from the census volumes

[1] U. S. Commission on Civil Rights, Counting the Forgotten. A report of the U. S. Commission on Civil Rights, April, 1974.

on the Black--and especially the Spanish surnamed--reflect numerical accuracy. It can be stated, however, that the population changes documented and described in this report are what occurred within the populations that were enumerated from 1950 to 1970.

Population Growth

In 1950 and 1960 Texas ranked sixth among the states in terms of population size and accounted for approximately five percent of the total U. S. population. The size of Texas' population was exceeded only by the states of Ohio, Illinois, Pennsylvania, California and New York. By 1970 Texas ranked fourth among the states in population size and accounted for approximately six percent of the total U. S. population. It was exceeded in population size only by Pennsylvania, New York and California.

Between 1950 and 1960 the population of Texas grew at a faster rate than the population of the United States. The total increase for the ten-year period in Texas was approximately 24 percent while the increase for the U. S. was 18.5 percent. During the 1960-1970 decade both Texas and the U. S. experienced a decline in population growth with the growth in Texas declining at a faster rate. Despite this faster decline, however, Texas still grew at a faster rate than did the U. S. population. Texas increased in size by 17 percent during this period while the U. S. increased its population by approximately 13 percent.

While the growth rate of the Texas population differed from that of the U. S., there were groups within Texas whose growth rates varied considerably from the growth rate of the State as a whole.

The population in Texas consists primarily of three large ethnic groups--Anglos, Mexican Americans and Blacks. One of the problems involved in

analyzing the demographic characteristics of these three groups concerns the information available on Mexican Americans.

Since 1950 the Census Bureau has used Spanish surnames as a way of identifying Mexican Americans, the assumption being that in Texas, for example, most of the Spanish surnamed people would be of Mexican origin. It was not until 1970, however, that information became available which would allow the testing of this assumption. The identity of the Spanish surnamed population in Texas is shown in Table 1[2]:

TABLE 1

Spanish Origin of Respondents With Spanish Surnames, Texas, 1970 (In Thousands)

Spanish Origin	Number	% of Total
Total	16,262	100.0%
Mexican	13,864	85.3%
Puerto Rican	36	.2%
Cuban	62	.4%
Central or South American	90	.6%
Other Spanish	710	4.4%
None of These	1,500	9.2%
Not Reported	0	0.0%

Source: U. S. Bureau of the Census, One in a Hundred, 5% Public Use Sample for Texas, 1970.

[2]In 1970 the Census Bureau used five different methods of identifying the Spanish origin population: foreign birth or parentage, Spanish surname, Spanish heritage, Spanish language and Spanish origin. In addition to this, for the five southwestern states, the Census Bureau combined the Spanish surname and Spanish language methods. Each one of these measures provides different estimates. For a more thorough discussion see Jose Hernandez, Leo Estrada and David Alvírez, "Census Data and the Problem of Conceptually Defining the Mexican American Population," Social Science Quarterly, March 1973 Vol. 53, No. 4. Also Counting the Forgotten, a Report of the U. S. Commission on Civil Rights, Washington, D. C., April 1974.

Obviously the majority of the Spanish surnamed people in Texas in 1970 were of Mexican origin, but there was also a noticeable percentage who were not. This means that any demographic analysis of Spanish surnamed people in Texas is not exclusively an analysis of Mexican Americans. Whether or not Mexican American demographic characteristics differ significantly from other Spanish surnamed people in Texas remains a matter for further research. Also, since no information similar to that presented in Table 1 exists for 1950 and 1960, there is no way of determining whether or not the Mexican origin people within the Spanish surnamed population have increased or decreased. Accordingly, the nomenclature used in this report will be Spanish surnamed population.

The growth rates for the three ethnic groups in Texas are shown in Table 2:

TABLE 2

Population Growth in Texas by Ethnic and/or Racial Groups
1950-1970

Ethnic/Racial Group	Population			Percent of Population			Percent Gain		
	1950	1960	1970	1950	1960	1970	1950 to 1960	1960 to 1970	1950 to 1970
Anglo*	5,699,079	6,957,021	8,053,561	73.9	72.6	71.9	22.1	15.7	41.3
Spanish surnamed	1,027,455	1,417,810	1,663,567	13.3	14.8	14.8	42.7	17.3	61.9
Black	977,458	1,185,476	1,399,005	12.6	12.3	12.4	21.3	18.0	44.1
Other Races	7,202	21,201	80,597	0.1	0.2	0.7	194.4	280.0	1,019.1
Total Population	7,711,194	9,581,508	11,196,730	100.0	100.0	100.0	24.3	16.9	45.2

*Throughout this report the Anglo population is estimated by subtracting the Spanish surnamed from the white population.
Source: U.S. Bureau of the Census, U.S. Census of Population: 1950, 1960, 1970.[3]

[3]Complete references for this and all other tables using census data appear at the end of the text.

The figures illustrate that of the three major groups, the Spanish surnamed population had the largest percentage gain in the 1950-1960 decade followed by Anglos and then Blacks.[4] The difference in the increase between Anglos and Blacks, however, was very slight. During the next decade all three groups experienced a decline in their growth rates. The Spanish surnamed experienced the sharpest decline while the Black population experienced the least decline. The Black population actually had the largest percentage gain of the three groups, even though the differences among the three groups were not very large.

For the 20-year period the average annual rate of growth was approximately 2.1 percent for the Anglo and Black populations and 3.1 percent for the Spanish surnamed. Even though there was an absolute increase in the size of each group, proportionately they changed very little. Anglos made up 74 percent of the total population in 1950 and 72 percent in 1970--a loss of only two percent. The Spanish surnamed comprised 13 percent of the population in 1950 and 15 percent in 1970. Blacks remained around 12 percent of the total population throughout the two decades. Thus, the size of each group relative to one another more or less remained the same.

The absolute numerical gain during the 1950-1960 decade was approximately 1.9 million people. The increase in the Anglo population accounted for 68 percent of the total, while the increase in the Spanish surnamed population

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[4]The larger percentage gain shown for the other races category is primarily a result of their small size in the State. A smaller number can double more easily than a larger number, and therefore a smaller numerical increase reflects a larger percentage gain.

accounted for 21 percent of the total. The increase in the number of Black people in the State made up the remaining 11 percent.

During the decade of the 1960's there was an absolute numerical gain of approximately 1.6 million people. The increase in the size of the Anglo population again accounted for approximately 68 percent of the gain. The numerical contribution by the Spanish surnamed was not as high as in the previous decade, being only 15 percent. Blacks were responsible for 13 percent of the total gain--slightly higher than in the previous decade.

Because of consistent immigration from Mexico, there are always at least three generations within the Spanish surnamed population--the foreign born, the children of the foreign born (or mixed parentage), and the children of native parentage.

Since 1950 the trend has been for the foreign born and children of the foreign born to proportionately decrease while the native born of native parents have tended to increase. Thus, as shown in Table 3, 18.2 percent of the total Spanish surnamed population was foreign born in 1950 compared

TABLE 3

Spanish Surnamed Population of Texas,
By Nativity and Parentage
1950-1970

Nativity & Parentage	Population			Percent of Population			Percent Gain		
	1950	1960	1970	1950	1960	1970	1950 to 1960	1960 to 1970	1950 to 1970
Natives of Native Parentage	477,910	776,284	980,821	46.5	54.8	59.4	62.4	26.3	105.2
Natives of Foreign or Mixed Parentage	362,625	442,387	479,575	35.3	31.2	29.1	22.0	8.4	32.2
Foreign Born	186,920	199,139	189,281	18.2	14.0	11.5	6.5	-.05	1.3
Total	1,027,455	1,417,810	1,649,677	100.0	100.0	100.0	38.0	16.4	60.5

Source: U.S. Bureau of the Census, U.S. Census of Population: 1950, 1960, 1970.

to 11.5 percent in 1970. On the other hand, 46.5 percent of the Mexican American people in 1950 were native born of native born parents, and this group increased to 59.4 percent in 1970.

Components of Population Change

A population may increase or decrease its size only through the occurrence of three events--births, deaths and migration. Births increase the size of population, deaths decrease the size, while migration may either increase or decrease the size of population. These three processes occur simultaneously, and it is the combination of the three events that determines the rate at which a population will change its size.

Even though birth, death and migration are events which occur simultaneously, it is desirable to isolate each of these components to determine the relative contribution of each to the overall population change.

The 1950-1960 Decade

During the 1950-1960 decade Texas population increased by 1,870,314--a gain of 24.3 percent over the 1950 population. The question, then, is how much of this increase is due to the natural increase; i.e., the excess of births over deaths and how much is due to net in- or out-migration. The calculations in Table 4 show that natural increase accounted for 90 percent of the increase while net in-migration accounted for the remaining 10 percent of the increase. Thus, it can be said of the 24.3 percent gain made by the Texas population between 1950 and 1960, 21.8 percent was due to natural increase and 2.5 percent was due to the in-migration from other areas.

TABLE 4

Estimating the Components of Growth
for the Total Population of Texas
1950-1960

1.	Number of persons in Texas, 1950 Census	7,711,194
2.	Number of births in the following 10 years	2,367,120
3.	Number of deaths in the following 10 years	684,983
4.	Estimated natural increase, 1950-1960 (line 2 minus line 3)	1,682,137
5.	Expected number of people in Texas, 1960 (line 1 plus line 4)	9,393,331
6.	Number of people actually enumerated in Texas, 1960 Census	9,581,508
7.	Estimated net in-migration of people, 1950-1960 (line 6 minus line 5)	188,177
8.	Total estimated population increase, 1950-1960 (line 4 plus line 7)	1,870,314

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

U. S. Department of Health, Education and Welfare, Vital Statistics of the United States, 1951-1960.

There are indications that the importance of natural increase and migration to the growth of the Anglo, Spanish surnamed and Black population varies considerably. The word "indications" is being used deliberately here because data problems prevent estimating within reasonable limits the extent of natural increase and migration for the Spanish population and consequently for the Anglo population.

The problem is that the Vital Statistics Bureau in Texas did not, until 1970, record and make available the births and deaths of the Spanish surnamed separately. Their births and deaths were recorded together with the Anglo group under the racial category "white." This presents a problem in attempting to determine the extent to which natural increase is

affecting the growth of both groups. Also, the size of the Spanish surnamed population is not only affected by in- or out-migration to and from other states, but also by the flow of Mexican immigrants to and from Mexico. The problem here is that the official data on legal immigrants was not collected until 1955.

Further, there is the problem of trying to determine the number of Mexicans who crossed into Texas illegally. How many there are and how many "accidently are counted in the census" is simply not known.

The only attempt to handle some of these problems has been an effort by Harley Browning and Dale McLemore in their Statistical Profile of the Spanish Surname Population of Texas[5]. The calculations they used are duplicated and presented in Table 5 for inspection.

The first three entries are straightforward and therefore do not need comment. The next six entries (4-9), however, do require comment for it is here that the problem of legal Mexican immigration from Mexico to Texas is dealt with. As mentioned, prior to 1955, there was no reasonable method to determine the number of legal Mexican immigrants who came to Texas each year. The only information available concerned the total number of Mexican immigrants who came to the U. S. The states they intended to reside in were not designated. In 1955 the Immigration and Naturalization Service began asking immigrants to declare the state in the U. S. in which they intended to reside permanently. Thus, during the period 1955-1960, 73,859 Mexican immigrants declared Texas as their state of intended permanent residence (entry 4). According to Browning and McLemore this number represented 79.6

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[5]Harley L. Browning and S. Dale McLemore, A Statistical Profile of the Spanish Surname Population of Texas, (Austin: Bureau of Business Research, The University of Texas, 1964).

TABLE 5

Estimated Components of Growth of the Spanish-Surnamed Population of Texas, 1950-1960

1.	Census-enumerated Texas Spanish-surnamed population, 1950		1,027,455
2.	Census-enumerated Texas Spanish-surnamed population, 1960		1,417,810
3.	Intercensal growth, 1950-1960		390,355
4.	Immigrant Mexican aliens declaring Texas as state of intended residence, 1955-1960	73,859	
5.	Estimate of immigrants to Texas from Mexico, 1950-1955	72,517	
6.	Total immigration, 1950-1960	146,376	
7.	Estimated emigration from Texas to Mexico, 1950-1960	8,500	
8.	Estimated mortality of immigrants, 1950-1960, from date of entry to 1960	6,800	
9.	Total emigration and mortality, 1950-1960	15,300	
10.	Estimated legal immigration less emigration and mortality		131,076
11.	Intercensal growth less net immigration		259,279
12.	Estimated natural increase of Spanish-surnamed population for the 1950-1960 period (30%)		308,236
13.	Natural increase less net immigration as estimate of net out-migration of Texas Spanish-surnamed population to other states		48,957

percent of the total immigration from all countries to the State of Texas. Since no comparable information was available for the 1950-1955 period, Browning and McLemore assumed that the proportion of total immigration to Texas from Mexico remained unchanged and therefore used the value of 79.6 percent to estimate the number of legal Mexican immigrants who migrated to Texas during the 1950-1955 period. This calculation yielded a figure of 72,517 (entry 5). This estimate added to the 1955-1960 figure previously

cited provides an estimate of the total number of Mexican immigrants who came to Texas from Mexico during the 1950-1960 decade (entry 6). In light of the lack of available data, this seems to be a reasonable approach.

The 7th entry concerns an estimate of the number of Mexican immigrants who migrated to Texas and who for various reasons returned to Mexico. Browning and McLemore do not cite a reference for their estimate, and therefore their figure cannot be corroborated. Also, since the Immigration and Naturalization Service does not publish this type of information, no independent estimate of return migration to Mexico was possible. Further, it cannot be determined whether or not the figure cited includes involuntary as well as voluntary return to Mexico. Despite these severe limitations, however, the phenomenon of return migration to Mexico, whether voluntary or involuntary, does indeed occur. Its importance unfortunately can only be guessed at.

In addition to migrants returning to Mexico, those Mexican nationals who remain in Texas experience mortality. This depletes the number of Mexican immigrants to be enumerated at the next census count. The problem here, then, is to try to determine the rate at which immigrants from Mexico are dying. It is a well documented generalization in the demography literature that most of the people who migrate are between the ages of 15 and 40. People between these ages experience a low mortality rate, and Browning and McLemore estimate that Mexican immigrants during the decade were dying at a rate of nine per thousand (entry 8). The death rate for Mexico during the 1950's indicates that this is a reasonable estimate.

The 10th and 11th entries are the estimates of legal immigration from Mexico as well as natural increase. If these figures are accepted, then it

appears that immigration from Mexico accounted for 34 percent of the total numerical increase while natural increase accounted for 66 percent. Browning and McLemore, however, argue that the 259,279 natural increase figure cited in entry 11 only represents a 25 percent increase over the 1950 Spanish surnamed total. This, they feel, is much too small an estimate. They believe that a natural increase estimate of 30 percent over the 1950 total is a more realistic assessment and therefore present that estimate in entry 12. The difference between entries 12 and 11, they conclude, is an estimate of net out-migration of Mexican Americans to other states.

Therefore, if we accept Browning and McLemore's figures (and they warn their readers to accept them cautiously), one-third of the numerical increase of the Spanish surnamed population during the 1950-1960 decade was due to legal immigration from Mexico and two-thirds to natural increase. In addition to this, the Spanish surnamed population experienced a net out-migration during the decade.

Even though some of the figures presented by Browning and McLemore can not be substantiated, it is felt that the general conclusions reached from their figures have a degree of validity. There cannot be any doubt that immigration from Mexico plays a larger part in the growth of the Spanish surnamed population that it does for other groups. The question seems to be how large a part.

One of the reasons for believing that the Spanish surnamed experienced a net out-migration is the fact that there was a net out-migration of Blacks during the decade. The figures in Table 6 indicate that approximately 8,352 Blacks left the State during the 1950-1960 decade. Thus, if one assumes

that groups with similar social and economic characteristics[6] will engage in similar types of migration behavior, it appears reasonable to assume

TABLE 6

Estimating the Components of Growth of the Black Population of Texas, 1950-1960

1.	Number of Black persons in Texas, 1950 Census	977,458
2.	Number of Black births in the following 10 years	328,481
3.	Number of Black deaths in the following 10 years	112,111
4.	Estimated natural increase, 1950-1960 (line 2 minus line 3)	216,370
5.	Expected number of Black persons, 1960 (line 2 minus line 3 plus line 1)	1,193,828
6.	Enumerated Black persons in Texas, 1960 Census	1,185,476
7.	Estimated net out-migration of Black persons, 1950-1960 (line 4 minus line 5)	8,352
8.	Total estimated Black population increase, 1950-1960 (line 4 minus line 7)	208,018

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

U. S. Department of Health, Education and Welfare, Vital Statistics of the United States, 1951-1960.

that both the Spanish surnamed and Blacks experienced a net out-migration. In addition to this Browning and McLemore argue that in-migration of Spanish surnamed people from the states north and east of Texas would not have been

[6] In 1949 the median income for persons with Spanish surnames was $980, and the median years of education completed for persons 25 years of age and over was 5.4. For the non-white population, the majority of which were Black, the figures were: median income, $1,168; median years of education completed, 7.0. In 1959 the median income for Spanish surnamed people was $1,536, and the median years of education completed for persons 14 years of age and over was 6.2. For the non-white population the comparable figures were $1,167 and 8.7. In 1969 the per capita income for the Spanish surnamed was $1,335, and the median years of education completed for persons over the age of 25 was 6.7. The figures for the Black population were $1,488 and 9.3.

very large, if any, since these states do not have large Spanish surnamed populations. The state west of Texas--New Mexico--experienced a net out-migration, some of which crossed into Texas, but Browning and McLemore feel that the number would not be very large since the number of Spanish surnamed people in New Mexico is not very large. The only other state with a sizable Spanish surnamed population is California, and Browning and McLemore feel that since the Spanish surnamed in California had a higher standard of living than in Texas, very few Spanish surnamed would have left California for Texas. As a matter of fact, the migration stream was probably in the other direction; i.e., from Texas to California. These reasons also appear to be reasonable explanations for a net out-migration of the Spanish surnamed population from the State. The extent of this net out-migration, however, is what cannot accurately be measured.

The net out-migration experienced by Blacks alluded to earlier means that the 208,018 population increase they experienced was due solely to natural increase.

Mention should be made here concerning one of the conventions used in manipulating statistics on the Black population. It is more or less standard operating procedure when using census data on the Black population to use the non-white figures rather than the figures on the Black population. The non-white category includes Blacks and other races (Japanese, Indian, Chinese, Filipino, etc.) which are all lumped together. The rationale for using the non-white category is that it consists primarily of Blacks and that, from a statistical point of view, the "other races" are so small in number they do not affect the trends and patterns of the Black population. In other words,

the non-white category is used in a synonymous sense to mean the Black population. If this convention had been used in estimating the components of growth of the Black population in Texas during the 1950-1960 decade, it would have resulted in estimating a net in-migration of approximately 2,250 Black people. This would have occurred because there was a net in-migration of other races to Texas during the decade (see Table 7). This would have distorted the actual population processes which were indeed occurring among the Black people as well as the other races. To be sure the "other races" category in Texas was small in 1950, amounting to approximately 7,200 people, and grew to approximately 21,200 in 1960. But the point to be made here is that, from a statistical point of view, separating the two categories does make a difference, at least as far as components of population growth are concerned.

TABLE 7

Estimating the Components of Growth
of Other Races* in Texas
1950-1960

1.	Number of other races in Texas, 1950 Census	7,202
2.	Number of births in the following 10 years	3,800
3.	Number of deaths in the following 10 years	406
4.	Estimated natural increase 1950-1960 (line 2 minus line 3)	3,394
5.	Expected number of other races, 1960 (line 2 minus line 3 plus line 1)	10,596
6.	Enumerated other races in Texas, 1960 Census	21,201
7.	Estimated net in-migration of other races 1950-1960 (line 5 minus line 4)	10,605
8.	Total estimated other races population increase 1950-1960 (line 4 plus line 7)	13,999

*Includes Indians, Japanese, Chinese, Filipino and other races.

Source: See Table 6.

It was mentioned earlier that one of the problems involved in estimating the relative contribution of natural increase to the growth of the Anglo and Spanish surnamed population is the recording of the births and deaths of each group under the rubric "white." However, if we compute the components of growth for the white population as shown in Table 8 and then take into consideration some of the estimates of the Spanish surnamed population previously made, some statements concerning the relative contribution of natural increase and migration to the growth of the Anglo population can be made. These calculations, however, also serve to magnify the data problems.

TABLE 8

Estimating the Components of Growth
of the White Population* of Texas
1950-1960

1.	Number of white persons in Texas, 1950 Census	6,726,534
2.	Number of white births following 10 years	2,034,839
3.	Number of white deaths following 10 years	572,466
4.	Estimated natural increase 1950-1960 (line 2 minus line 3)	1,462,373
5.	Expected number of white persons, 1960 (line 1 plus line 4)	8,188,907
6.	Enumerated white persons in Texas, 1960 Census	8,374,831
7.	Estimated net in-migration of white persons, 1950-1960 (line 5 minus line 4)	185,924
8.	Total estimated white population increase 1950-1960 (line 4 plus line 7)	1,648,297

*Includes Anglos and Spanish surnamed.

Source: See Table 6.

First, if we accept the conclusion that the Spanish surnamed experienced a net out-migration, then the net in-migration figure shown in entry 7 of

Table 8 must all represent Anglos. Also, if we subtract the natural increase figure for the Spanish surnamed shown in Table 5 from the natural increase for whites shown in Table 8, an estimate of the natural increase of Anglos is provided. These calculations are shown below:

1,462,373 white natural increase Entry 4 (Table 8)
259,279 Spanish surnamed natural increase Entry 11 (Table 5)
1,203,094 Estimated Anglo natural increase

1,203,094 (87 percent) Anglo natural increase
185,924 (13 percent) Anglo net in-migration
1,389,018 (100 percent) Estimated Anglo increase 1950-1960

Assuming these are more or less reasonable estimates, then the majority of the increase in size of the Anglo population was also due to natural increase. But the figures unfortunately are not reasonably accurate. The total Anglo increase shown above is approximately 10 percent higher than reported by the Census Bureau (see Table 2). The discrepancy between the two numbers is undoubtedly due to the faulty information on the Spanish surnamed.

The 1960-1970 Decade

It will be recalled from Table 2 that in comparison to the 1950-1960 decade, the growth of the total population of Texas slowed somewhat during the 1960-1970 decade. Despite this slowing down, however, the population patterns set by the Anglos and Blacks and the "other races" during the previous decade remained the same.

Table 9 presents the components of growth for the total population for the 1960-1970 decade. In comparison to the previous decade the relative

TABLE 9

Estimating the Components of Growth
for the Total Population of Texas
1960-1970

1.	Number of people in Texas, 1960 Census	9,581,508
2.	Number of total births following 10 years	2,275,223
3.	Number of total deaths following 10 years	851,126
4.	Estimated natural increase, 1960-1970 (line 2 minus line 3)	1,424,097
5.	Expected number of people in Texas, 1970 (line 1 plus line 4)	11,005,605
6.	Number of people actually enumerated in Texas, 1970 Census	11,196,730
7.	Estimated net in-migration of people, 1960-1970 (line 6 minus line 5)	191,125
8.	Total estimated population increase 1960-1970 (line 4 plus line 7)	1,615,222

Source: U. S. Bureau of the Census, U. S. Census of Population: 1960, 1970.

U. S. Department of Health, Education and Welfare, Vital Statistics of the United States, 1961-1968.

changes of each of the components to the overall population increase were slight but noticeable. The number of in-migrants increased over the previous decade by approximately 2,900, while the numerical contribution of natural increase declined by 258,040 people. This means the decline in total population growth during the 1960-1970 period was due solely to a decline in natural increase. In 1960 the rate of natural increase was approximately 18 per 1,000 people. By 1970 the rate had decreased to approximately 12 per 1,000. This decrease was a result of a decline in the birth rate of the population rather than a change in the death rate. The crude birth rate, for example, dropped from approximately 26 births per

1,000 people in 1960 to approximately 21 per 1,000 in 1970. The crude death rate on the other hand remained around 8 deaths for every 1,000 persons in both 1960 and 1970. During the 1960-1970 decade, net in-migration accounted for 12 percent of the numerical increase in the total population while natural increase comprised the remaining 88 percent. These percentages are only slightly different from those of the previous decade.

As in the previous decade there were distinct differences in the components of growth for the ethnic groups in Texas. Table 10 shows that the

TABLE 10

Estimating the Components of Growth
of the White Population* of Texas
1960-1970

1.	Number of white persons in Texas, 1960 Census	8,376,937
2.	Number of white births following 10 years	1,923,867
3.	Number of white deaths following 10 years	719,461
4.	Estimated natural increase 1960-1970 (line 2 minus line 3)	1,204,406
5.	Expected number of white persons, 1970 (line 1 plus line 4)	9,581,343
6.	Enumerated white persons in Texas, 1970 Census	9,717,128
7.	Estimated net in-migration of white persons, 1960-1970 (line 5 minus line 4)	135,785
8.	Total estimated white population increase 1960-1970 (line 4 plus line 7)	1,340,191

*Includes Anglos and Spanish surnamed.

Source: See Table 9.

white population experienced a net in-migration of approximately 135,785 people. This is approximately 50,000 less in-migrants than in the previous decade. Natural increase for whites also decreased. During the 1960-1970

period 1,204,406 people were added to the population as a result of natural increase. This is 257,967 fewer people than in the previous decade. The rate of natural increase fell from 17.5 per 1,000 in 1960 to 11.9 per 1,000 in 1970. Since the crude death rate remained more or less stable throughout the decade the decrease in the rate of natural increase was due largely to a drop in the birth rate. In 1960 the crude birth rate for whites was 25.3 per 1,000 people and fell to 20.2 per 1,000 people by 1970. Thus, the white population followed the same pattern as the total population.

White in-migration accounted for 10 percent of the absolute increase while white natural increase comprised the remaining 90 percent. These percentages are the same as those in the previous decade.

As in the previous decade Blacks experienced a net out-migration of people (see Table 11). The number of Blacks who left the State, however,

TABLE 11

Estimating the Components of Growth
of the Black Population of Texas
1960-1970

1.	Number of Black persons in Texas, 1960 Census	1,185,476
2.	Number of Black births in the following 10 years	346,272
3.	Number of Black deaths in the following 10 years	130,952
4.	Estimated natural increase 1960-1970 (line 2 minus line 3)	215,320
5.	Expected number of Black persons, 1970 (line 1 plus line 4)	1,400,796
6.	Enumerated Black persons in Texas, 1970 Census	1,399,005
7.	Estimated net out-migration of Black persons, 1960-1970 (line 4 minus line 5)	1,791
8.	Total estimated Black population increase 1960-1970 (line 4 minus line 7)	213,529

Source: See Table 9.

was approximately 6,000 less than in the 1950-1960 years. This means that in this decade as well as in the previous one, the excess of births over deaths was primarily responsible for the increase in their population. But even though natural increase was the only factor contributing to the growth of the Black population, it was declining. It fell from 20 per 1,000 in 1960 to 15 per 1,000 in 1970. Since the death rate remained at approximately 10 per 1,000 people, the decline in natural increase was also due to the decline in the birth rate.

Unlike the white and Black populations, natural increase was not the primary reason why the number of other races increased (see Table 12). As a matter of fact the rate of natural increase for other races fell drastically from 24.8 per 1,000 in 1960 to 6 per 1,000 in 1968. It accounted for

TABLE 12

Estimating the Components of Growth
of Other Races* in Texas
1960-1970

1.	Number of other races in Texas, 1960 Census	21,201
2.	Number of births in the following 10 years	5,084
3.	Number of deaths in the following 10 years	714
4.	Estimated natural increase 1960-1970 (line 2 minus line 3)	4,370
5.	Expected number of other races, 1970 (line 1 plus line 4)	25,571
6.	Enumerated other races in Texas 1970 Census	80,565
7.	Estimated net in-migration of other races, 1960-1970 (line 5 minus line 4)	54,994
8.	Total estimated other races population increase 1960-1970 (line 4 plus line 7)	59,364

*Includes Indians, Japanese, Chinese, Filipino and other races.

Source: See Table 9.

only seven percent of the absolute numerical increase. On the other hand net in-migration accounted for 93 percent of the increase.

If the procedure set out by Browning and McLemore is used for estimating the components of growth for the Spanish surnamed population for the 1960-1970 years, a picture similar to that of the previous decade emerges. (See Table 13.)

TABLE 13

Estimated Components of Growth of the Spanish-Surnamed Population of Texas, 1960-1970

1.	Census-enumerated Texas Spanish-surnamed population, 1960		1,417,810
2.	Census-enumerated Texas Spanish-surnamed population, 1970		1,663,567
3.	Intercensal growth, 1960-1970		245,757
4.	Mexican immigrants declaring Texas as state of intended residence, 1960-1970	112,655	
5.	Estimated emigration from Texas to Mexico, 1960-1970	6,760	
6.	Estimated mortality of immigrants, 1960-1970, from date of entry to 1970	5,038	
7.	Total emigration and mortality, 1960-1970	11,798	
8.	Estimated legal immigration less emigration and mortality		100,857
9.	Intercensal growth less net immigration		144,900
10.	Estimated natural increase 1960-1970 (25%)		354,452
11.	Natural increase less net immigration as estimate of net out-migration of Texas Spanish-surnamed population to other states		209,552

The data presented in Table 13 show that the numerical intercensal increase was smaller during the 1960-1970 period than in the previous decade. It also shows that the number of Mexican immigrants who came to Texas declined. This figure came from the immigration and naturalization publications and cannot be reconciled with the census information presented in Table 3. The latter indicates that the number of foreign born Mexicans in Texas actually decreased during the 1960-1970 decade. If so, either the rate of return migration to Mexico is much higher than we estimate in entry 5, or the death rate of Mexican immigrants is much higher than the one used in calculating the figure in entry 6, or there is a gross undercount of the number of immigrant Mexicans in the State. The inclination is to believe the latter.

Since there is no information available on the number of Mexicans who return to Mexico, the figure in entry 5 is nothing more than an educated guess. The figure represents approximately six percent of the immigrants presented in entry 4. This is the same percentage of immigrants who returned to Mexico in the previous decade.

The mortality rate applied to the immigrants was nine deaths per 1,000 people. This is the same rate used by Browning and McLemore for the previous decade. The death rates for Mexico indicate that this is more or less an accurate rate to use also for the 1960-1970 decade. Entry 9 shows the intercensal growth after the immigration factors have been accounted for.

The rate of natural increase for the Spanish surnamed population was estimated to be 25 percent for the decade since there are indications that their birth rate declined during this period.

If the estimates are accepted as an approximation of how the Spanish surnamed population grew, then 60 percent was due to natural increase and 40

percent to immigration from Mexico. Further, the estimate of out-migration is four times as high as in the previous decade.

If there was indeed a net out-migration of Mexican Americans, then once again the white in-migrants in Table 10 must have been all Anglos. Assuming this is so, then the following calculations can be made in estimating the component of growth for the Anglo population.

1,204,406 white natural increase (Table 10)
144,900 Spanish surnamed natural increase (Table 13)
1,059,506 Estimated Anglo natural increase

1,059,506 (89 percent) Anglo natural increase
135,785 (11 percent) Anglo net in-migration
1,195,291 Estimated Anglo increase, 1960-1970

Even though there was a decline in growth for the Anglo population, the relative contribution of natural increase to the overall growth increased. This is because there was a decline in the number of Anglo people who migrated to Texas.

The estimated total Anglo increase was again higher than the increase reported in the census. Once more then, here is the problem of reliable information. The central question again concerns the extent of legal immigration from Mexico and whether or not the Spanish surnamed were leaving the State and if so, to what extent.

Assuming once more that people occupying the same socioeconomic positions will engage in similar behavior, then it seems possible that the Spanish surnamed as well as Blacks were leaving the State during 1960-1970. But the 209,552 net out-migration figure cited in Table 13 seems excessive in light of the approximately 1,800 Blacks who left the State. Nevertheless, until

more accurate information becomes available, procedures such as the ones presented are what will have to be used in estimating the components of Anglo and Spanish surnamed population growth.

Fertility Behavior

As already pointed out, the major component affecting population growth is the fluctuation in the birth rate. But, as mentioned, the data problems prevent the kind of analysis desired. Nevertheless, there is one measure which indirectly provides information concerning the fertility behavior of the population and how it was fluctuating.

This measure is referred to as the child-woman ratio and is computed by dividing the number of children under five by the number of women between the ages of 15 to 49 and then multiplying by a 1,000. This 34 year span is generally considered to be the childbearing ages. These ratios for all three groups are shown in Table 14.

TABLE 14

Child - Woman Ratios by Ethnic Group
In Texas, 1950-1970

Year	Total	Anglo	Black	Spanish Surname
1950	449	407	445	708
1960	519	459	624	745
1970	367	323	454	518

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

The general fertility pattern indicated for each group is an increase in fertility during the 1950's followed by a decline in the 1960's. At each time period the Spanish surnamed had the highest fertility rate. In 1950, for example, there were 708 children under the age of five for every 1,000 women between the ages of 15 and 49. This is 74 percent higher than the Anglo ratio and 59 percent higher than the ratio of Blacks. In comparison, the Black ratio was only nine percent higher than the Anglo ratio.

During the 20 year period, however, there appears a trend towards the convergence of Black and Spanish surnamed fertility behavior and a divergence in the fertility behavior of Blacks and Anglos. Further, it appears that these trends are primarily due to a faster increase in the fertility rate of Blacks.

In 1950, the child-woman ratio of the Spanish surnamed was 59 percent higher than the Black ratio. By 1970 the difference had declined to 14 percent. Most of this difference was reduced in the 1960's when there was a rapid increase in the number of children born to Black women. The child-woman ratio indicates that the already high fertility of the Spanish surnamed only increased a small amount during the 1950's. Thus, the child-woman ratio was only five percent higher in 1960 than it was in 1950. The child-woman ratio of Blacks, in comparison, was 40 percent higher in 1960 than it was in 1950. Thus, even though the number of children under five was increasing for both groups, the rate of increase for Black women was eight times as fast as the Spanish surnamed rate.

The divergence of Black and Anglo fertility behavior did not occur as fast as the convergence between the fertility behavior of Spanish surnamed and Black women, but it is still very noticeable. For example, in 1970 the

Black child-woman ratio was 41 percent higher than the Anglo ratio. This represents a 32 percent increase since 1950. Most of this increase occurred in the 1950's but also continued into the 1960's.

According to the child-woman ratios the difference between Anglo and Spanish surnamed fertility was reduced in the 1950's. The difference between the child-woman ratios declined from 74 percent in 1950 to 60 percent in 1960. Throughout the 1960's it appears that this difference stabilized, for in 1970 it was still 60 percent.

What can be expected to occur in the 1970's? While any and all predictions should be made with caution, it is possible to make some reasonable judgments by comparing the number of children ever born by age of women in 1960 and 1970. This information is shown in Table 15.

TABLE 15

Percent Change in the Number of Children Ever Born
Per 1,000 Women in Texas by Ethnic Group by Age, 1960 and 1970

	Anglo			Spanish Surname			Black		
	1960	1970	% Change 1960-70	1960	1970	% Change 1960-70	1960	1970	% Change 1960-70
15-19	165	92	- 44.0	184	160	- 13.0	260	297	14.0
20-24	1,113	716	- 35.6	1,337	1,058	- 21.0	1,421	1,157	- 18.5
25-29	2,066	1,743	- 15.6	2,654	2,515	- .05	2,287	2,483	8.5
30-34	2,311	2,520	9.0	3,665	3,480	- .05	2,729	3,392	24.3
35-39	2,409	2,809	16.6	3,966	4,400	11.0	2,887	3,348	16.0
40-44	2,234	2,702	20.9	4,524	4,660	3.0	2,912	3,923	34.7
45-49	2,070	2,515	21.5	4,050	4,352	7.0	2,695	3,181	18.0
15-49	1,745	1,701	- .03	2,582	2,458	- .05	2,090	2,243	7.3

Source: U. S. Census, One in a Hundred Public Use Samples, 1960, 1970.

It appears that the fertility of Anglos and the Spanish surnamed will continue to decline into the 1970's. Notice that most women in both groups under 30 in 1970 were having fewer children than their counterparts ten years ago. Also, the Anglo rate may fall faster than the Spanish surnamed rate. For example, Anglo women 20 to 24 in 1970 had 36 percent fewer children than Anglo women of the same age in 1960. In comparison, Spanish surnamed women of the same age had 21 percent fewer children in 1970.

The fertility rate of Black women on the other hand may start to increase in the 1970's. Only one age group, 20 to 24, showed any reduction in the number of children ever born from 1960 to 1970.

Population Concentration

Population concentration underwent definite changes in Texas during the 1950-1970 period. These changes can be categorized as:

1. an increase in the number of people residing in the urban areas;
2. within the urban areas an increase in the number of people living in metropolitan areas;
3. an increase in the number of metropolitan areas; and
4. a distinct shift in population concentration towards the eastern half of the State.

The general trend in Texas, as well as in the U. S., has been for the population to grow in the urban areas and to decrease in the rural areas. The Census Bureau defines an urban area as any area which has a population of 2,500 or more people. All areas not defined as urban are classified as rural areas. The general trend is well illustrated by the information presented in Table 16. Approximately 80 percent of the total population of Texas in 1970 was living in the urban areas, while only 63 percent was

found in the urban areas in 1950. This represents an increase of approximately 17 percent in 20 years. Conversely, the total population residing in the rural areas decreased 17 percentage points from 37 percent in 1950 to 20 percent in 1970.

TABLE 16

Percent of Texas Population Living in Urban and Rural Areas by Ethnic Group 1950-1970

	Urban			Rural		
	1950	1960	1970	1950	1960	1970
Spanish surnamed	68.1	78.6	83.4	31.9	21.4	16.6
Black	62.6	75.0	83.5	37.4	25.0	16.5
Anglo	61.7	74.3	78.5	38.3	25.7	21.5
Other Races	57.5	80.3	86.4	42.5	19.7	13.6
Total Population	62.7	75.0	79.7	37.3	25.0	20.3

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

According to the information in the table, Blacks and Spanish surnamed people have been more concentrated in urban areas than Anglos. Also the Spanish surnamed were more urbanized in 1950 and 1960 than either Anglos or Blacks. Throughout the two decades, however, the Black population was growing in the urban areas at a faster rate than the Spanish surnamed population so that by 1970 about the same proportion of each group was living in urban areas. Also, both groups grew about twice as fast in the urban areas as did the Anglo population during the 1950's and 1960's.

Even though the Census Bureau refers to all areas of 2,500 or more as urban, the concentration of people is much more dense than the definition would lead one to believe. In 1950, for example, 74 percent of all the

people residing in areas of 2,500 inhabitants or more were actually living in metropolitan centers which had one city or twin cities of 50,000 or more people. By 1970 this had increased to 92 percent.

The growth in the metropolitan areas is shown in Table 17.[7] Generally,

TABLE 17

Growth of Population in Metropolitan Areas of Texas by Ethnic Group, 1950-1970

Ethnic Group	Population Size			% Gain		
	1950	1960	1970	1950-60	1960-70	1950-70
Anglo	3,461,128	4,791,229	5,861,117	38.4	22.3	69.4
Spanish surnamed	719,682	1,031,900	1,255,211	46.4	21.6	74.4
Black	576,978	820,984	1,055,769	42.3	28.6	82.9
Total	4,764,143	6,656,560	8,234,458	39.7	23.7	72.8

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

[7] One of the problems involved in observing population growth over time in the metropolitan areas is having comparable units at each point in time. A metropolitan area is defined by the Census Bureau as a "county or group of contiguous counties which contain at least one city of 50,000 inhabitants or more or twin cities with a combined population of at least 50,000. In addition to the county or counties containing such a city or cities, contiguous counties are included...if according to certain criteria they are socially and economically integrated with the central city." As time goes on, then, a particular metropolitan area may include an additional county in accordance with the criteria of being socially and economically integrated with the central city. For example, in 1950 the metropolitan area of Dallas included only one county. By 1970 the metropolitan area of Dallas included six counties.

An additional problem is the increase in the total number of metropolitan areas. As mentioned in the text there was a 60 percent increase from 1950 to 1970 in the number of metropolitan areas. The number increased from 15 to 24.

The procedure used to solve these two problems was to adjust the size and number of the metropolitan areas in 1950 and 1960 to correspond to the size and number in 1970. This procedure makes it appear that there were 24 metropolitan areas in 1950 as well as in 1970 and that they were of the same geographical size throughout the 20 year period. This of course is not true, but this adjustment is the only practical one to make in order to estimate population growth over time.

the growth pattern followed that of the State. This is to say, the population increased during the 1950-1960 decade and continued to increase during the next decade but at a much slower rate. In each decade, however, the percentage increase in the metropolitan areas was higher than for the State. This is true for Anglos, Blacks and the Spanish surnamed. This finding should not be too surprising though, considering that 62 percent of the State's population was living in metropolitan areas in 1950, and this had increased to 74 percent by 1970.

In addition to the increase in the number of people living in metropolitan areas, there was also an increase in the number of metropolitan areas as shown in Table 18. In 1950 there were 15 metropolitan areas in Texas. During the 1950's six new areas acquired metropolitan status. Three of these areas were located in the western half of the State, two in the eastern half and one in South Texas. In the 1960's three more areas grew

TABLE 18

Metropolitan Areas* In Texas 1950-1970

Metropolitan Areas in 1950:	Grew to Metropolitan Size During the 1950's
Amarillo	Abilene
Austin	Brownsville-Harlingen-San Benito
Beaumont-Pt. Arthur	Midland
Corpus Christi	Odessa
Dallas	Texarkana
El Paso	Tyler
Fort Worth	
Galveston	
Houston	Grew to Metropolitan Size During the 1960's
Laredo	Bryan-College Station
Lubbock	McAllen-Pharr-Edinburg
San Angelo	Sherman-Denison
San Antonio	
Waco	
Wichita Falls	

*The name of the metropolitan area refers to the name of the central city or cities within the area.

to metropolitan size. Of these, two were located in the eastern half of the State and one in South Texas. By 1970 there were 24 metropolitan areas in Texas. This represents a 60 percent increase in 20 years. Texas had more metropolitan areas in 1970 than any other state in the union. The geographical location of these areas in 1970 is shown in Map 1.

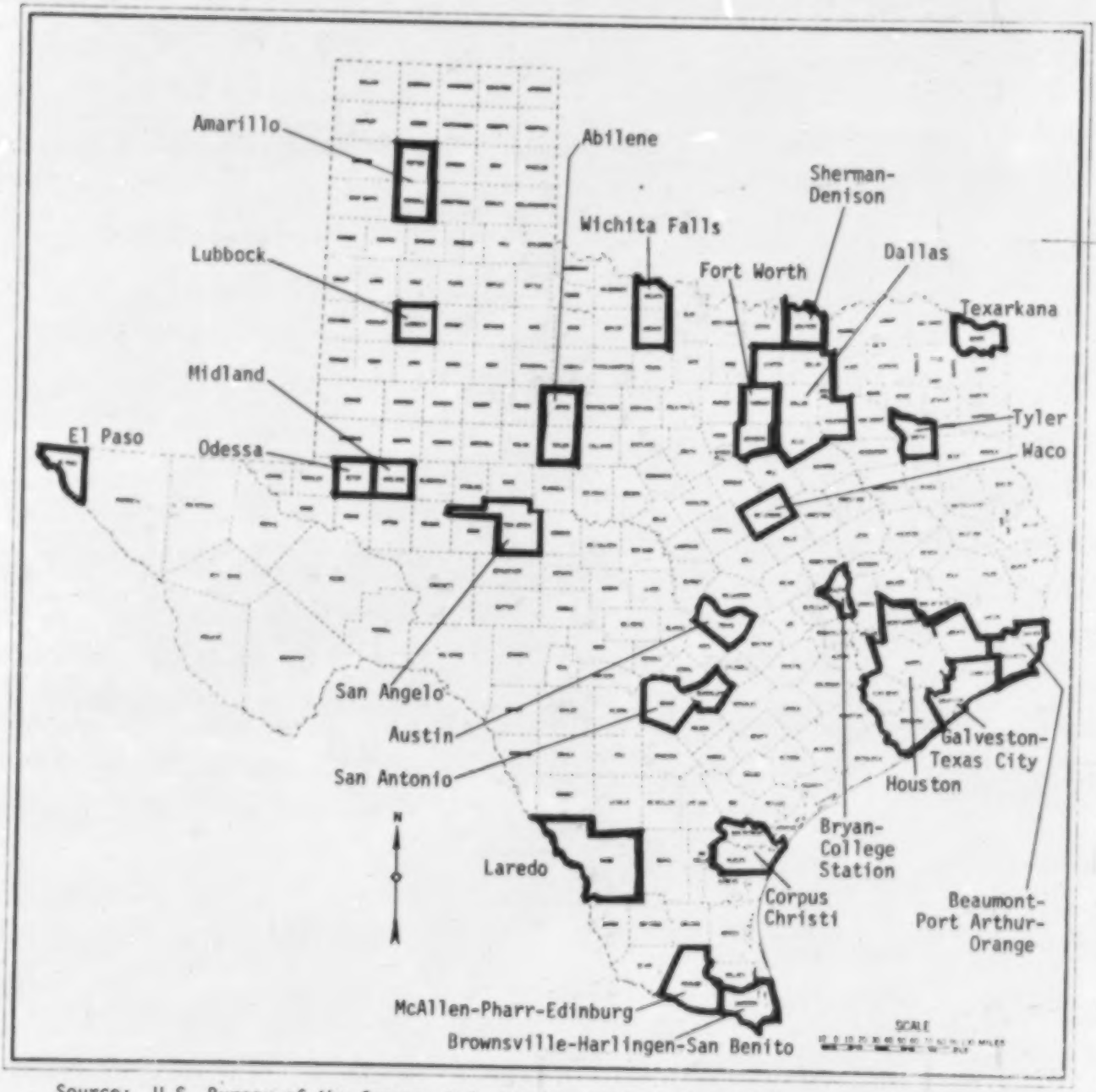
The increasing concentration of people in the eastern half of the State is largely occurring in the Dallas, Fort Worth and Houston metropolitan areas. The population of Houston more than doubled during the period 1950 to 1970, while the population of Dallas and Fort Worth came close to doubling. Almost 40 percent of the total population of Texas in 1970 lived in these three metropolitan centers in comparison to 27 percent in 1950. At least 40 percent of the total Anglo population and slightly over 50 percent of the total Black population in the State lived in these three areas in 1970 in comparison to 30 percent of the Anglos and 34 percent of the Black population in 1950. The lowest percentage is for the Spanish surnamed--seven percent in 1950 and 16 percent in 1970--but, as will be pointed out later, this may be changing.

The shifting Texas population is more graphically presented in Maps 2 and 3. During the decade of 1950-1960, the western as well as the eastern half of the State was growing, as the Abilene, Midland and Odessa areas in the west became metropolitan areas. In the next decade, however, there is a more distinct population shift towards the eastern half of the State. Most of the areas in West Texas which gained population in the 1950's lost population during the 1960's.

One of the distinguishing characteristics of population concentration in Texas is the regional concentration of Blacks and the Spanish surnamed.

MAP 1

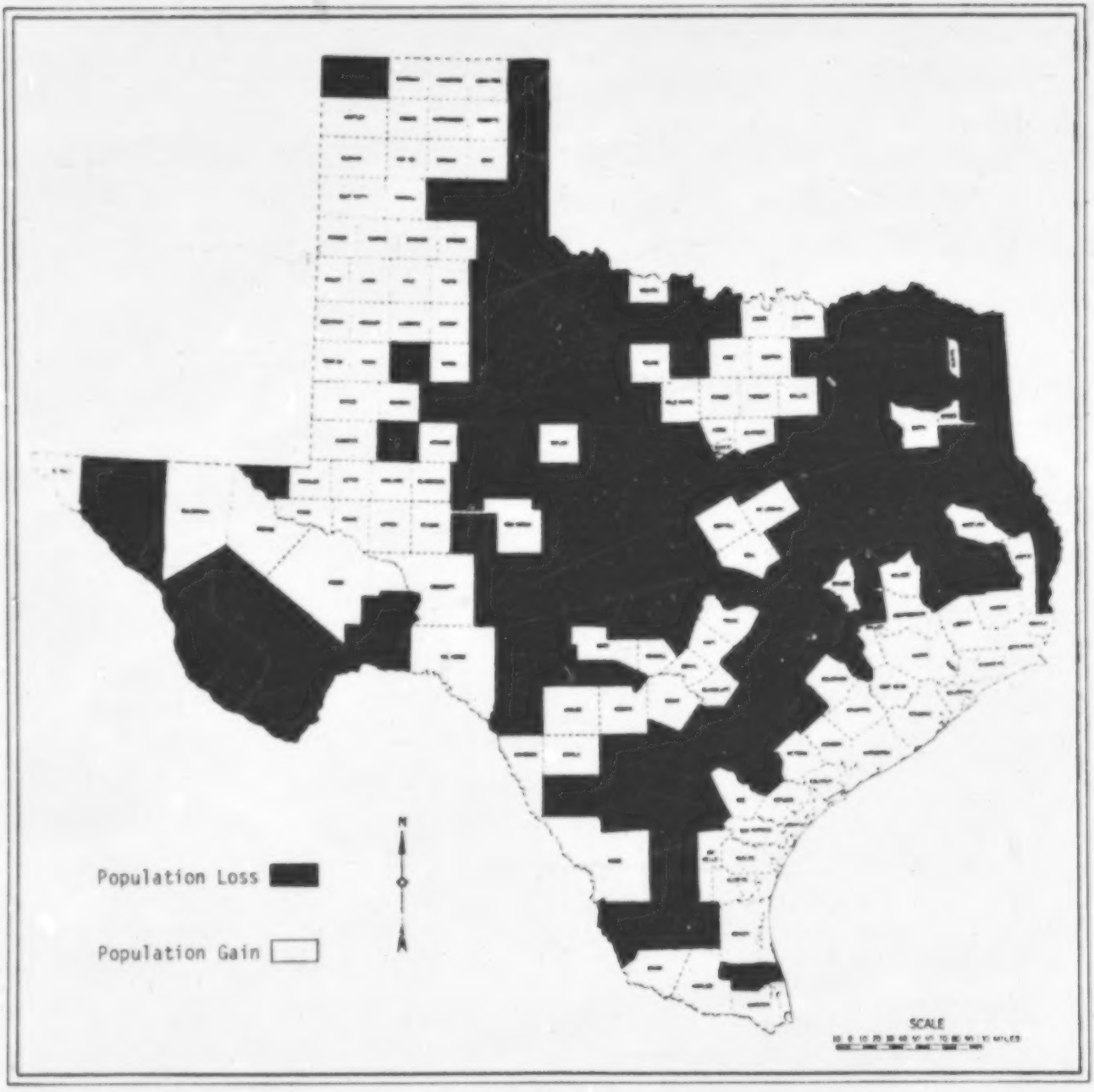
Standard Metropolitan Statistical Areas, 1970



Source: U.S. Bureau of the Census, U.S. Census of Population, 1970.

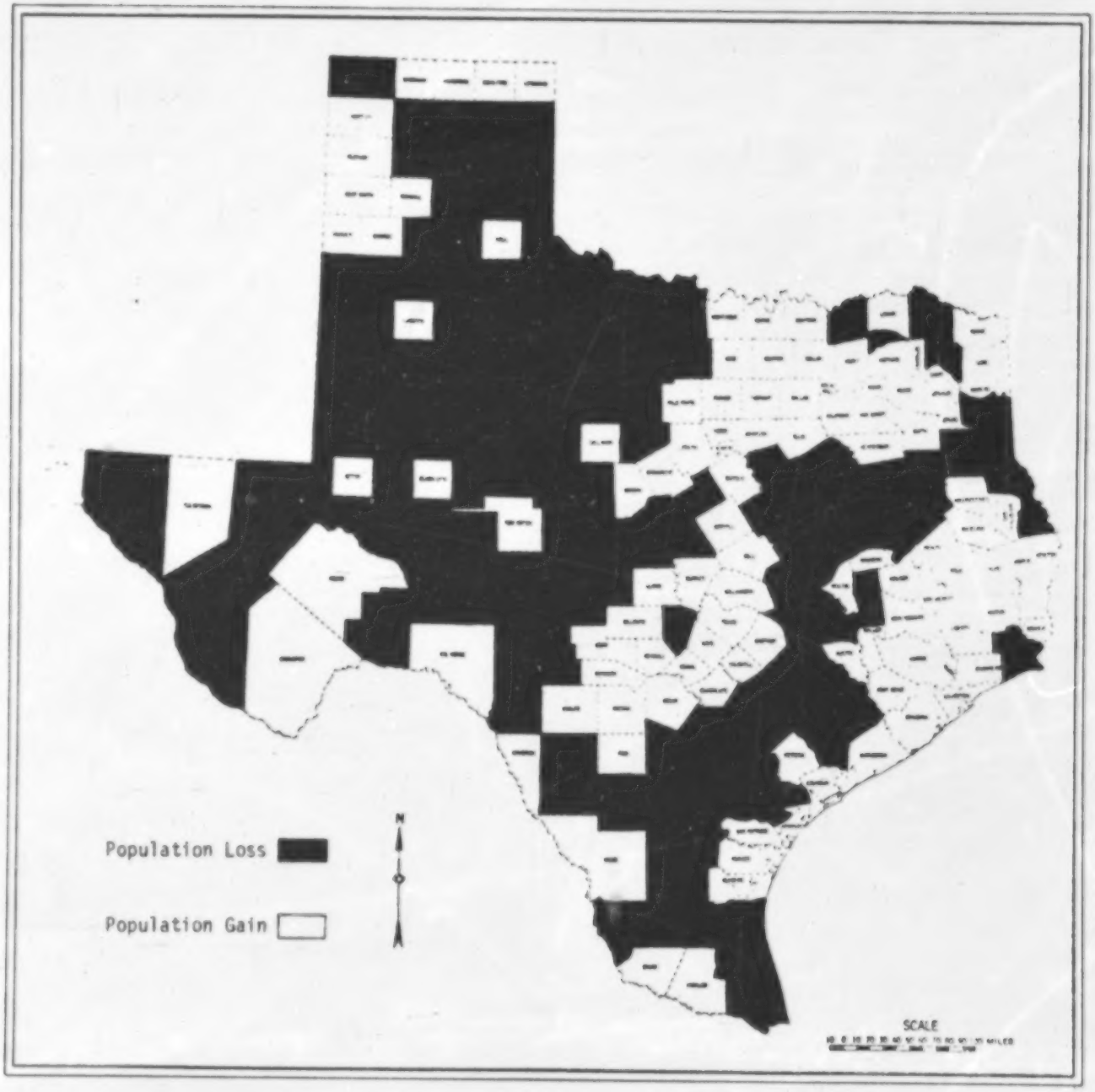
MAP 2

Population Gain and Loss in Texas, 1950-1960



MAP 3

Population Gain and Loss in Texas, 1960-1970



The Spanish surnamed population is heavily concentrated in the southern and western parts of the State, while Blacks are concentrated in the eastern part of the State.

One way to view this concentration is to consider the number of counties in the State with a Black or Mexican American population of 25 percent or more. This is shown in Map 4. There were 54 counties with a Mexican American population of 25 percent or more, and all but six of the counties were located in the southern half of the State. In comparison there were only 26 counties with a Black population of 25 percent or more, and all but one were located in the eastern half of the State.

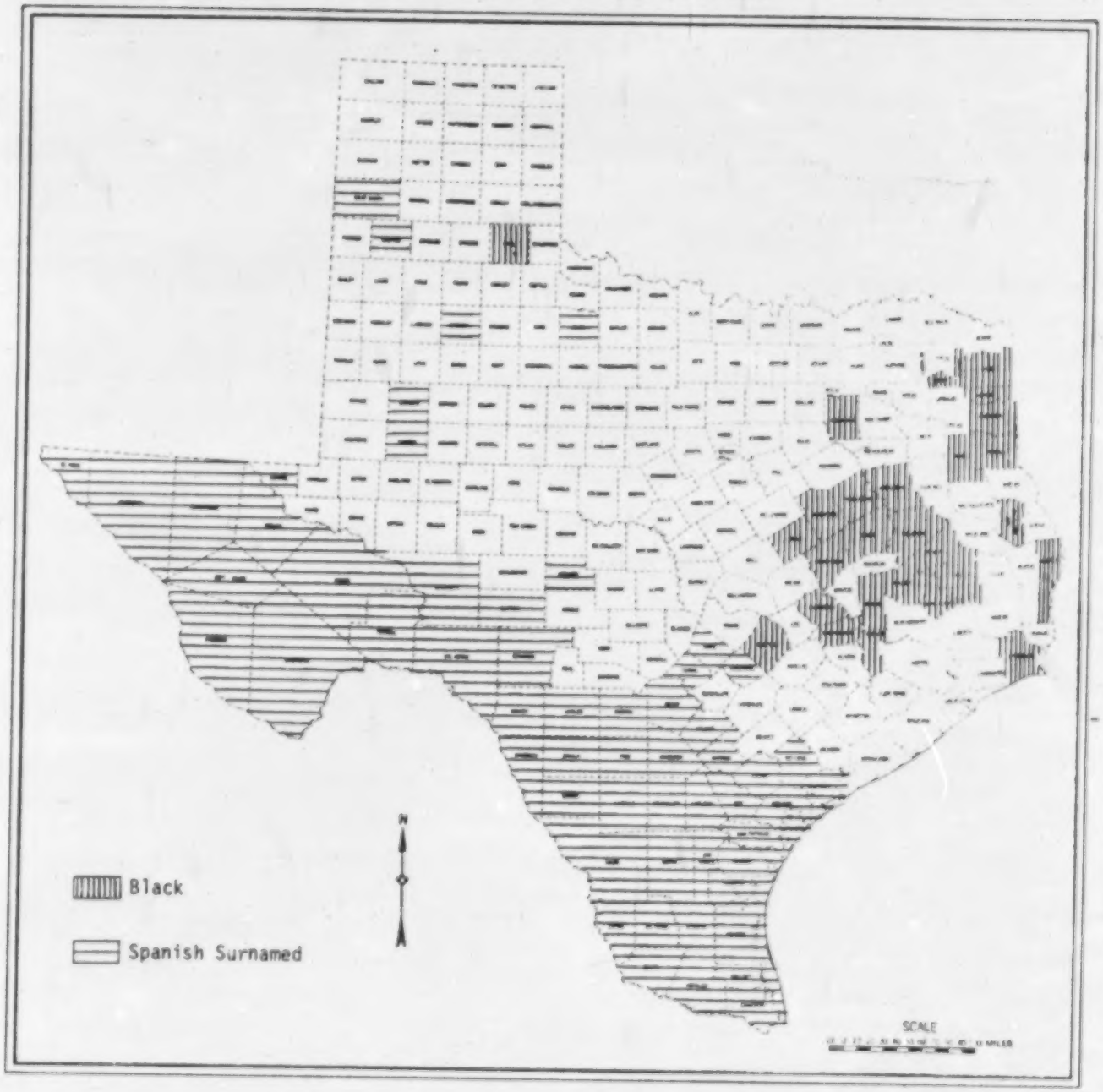
A county-by-county presentation of ethnic population concentration, however, distorts the picture somewhat. First of all, many of these counties do not have large populations. Burleson County, for example, with a Black population of 28 percent, only has a total population of approximately 1,000. Likewise, Zapata County, with a population which is 85 percent Spanish surnamed, only has a total population of approximately 4,300.

Second, and more important, the majority of Spanish surnamed people in South Texas live in the metropolitan cities of the area while the majority of Blacks are located in the metropolitan cities of East Texas. The ethnic concentration is still regional, but a more accurate picture is presented if this concentration in the metropolitan areas is considered.

The metropolitan areas of South Texas are San Antonio, Corpus Christi, the Brownsville-Harlingen-San Benito area, Laredo and the McAllen-Pharr-Edinburg area. The last three areas form part of the Texas-Mexico border. In 1950, the five South Texas metropolitan centers contained 49 percent of the State's Spanish surnamed population and 42 percent in 1970. San Antonio

MAP 4

Counties with 25 Percent or More of
Spanish Surname and Black Population, 1970



is the largest of the metropolitan areas and contained approximately 18 percent of the State's Spanish surnamed population throughout the 1950's and 1960's, the single largest concentration of Spanish surnamed people in Texas. If the metropolitan area of El Paso is included with the South Texas areas, these six metropolitan centers accounted for 58 percent of the State's Mexican American population in 1950 and 52 percent in 1970.

But the Spanish surnamed did not live alone in these areas. At least since 1950, Anglos comprised 45 percent or more of the total population combined in these areas. However, most of the Anglo population was living in the larger metropolitan centers of San Antonio, Corpus Christi and El Paso. In the remaining areas Anglos were outnumbered by Mexican Americans by a ratio of two to one.

The number of Blacks in South Texas, on the other hand, is very small. From 1950 to 1970 there were fewer than 1,000 Blacks each in Laredo, Brownsville-Harlingen-San Benito, and the McAllen-Pharr-Edinburg area. The largest concentration of Blacks in South Texas is found in San Antonio. But here they comprised only seven percent of the total population throughout the 1950's and 1960's. Another way of emphasizing the small number of Blacks in South Texas is to consider that the combined Black population in the six metropolitan areas mentioned never had more than six percent of the State's Black population from 1950 to 1970.

The South Texas and El Paso metropolitan areas will probably always have a substantial concentration of Spanish surnamed people because of their close proximity to Mexico. The trends indicate, however, that the growth of the Spanish surnamed population in these areas is slowing down considerably,

especially in the most southern part of the State (see Table 19). The increase in the size of the Spanish surnamed population was the lowest in the State in the Brownsville-Harlingen-San Benito, McAllen-Pharr-Edinburg, and Laredo metropolitan areas between 1950 and 1960. Laredo, with a nine percent increase, had the lowest rate of increase in the State. Between 1960 and 1970 in the Brownsville-Harlingen-San Benito and McAllen-Pharr-Edinburg areas the Spanish surnamed actually show a slight loss in population size. In Laredo the Spanish surnamed grew by only four percent during this decade.

TABLE 19

Growth of Spanish Surnamed Population in Selected Metropolitan Areas of Texas, 1950-1970

	Population Size			Percent Gain		
	1950	1960	1970	1950-60	1960-70	1950-70
San Antonio	182,924	263,961	314,537	44.3	19.2	71.9
Corpus Christi	77,401	106,625	107,983	37.8	1.3	39.5
Brownsville-Harlingen-San Benito	81,080	96,744	91,194	19.3	-.06	12.5
Laredo	47,525	51,784	53,817	9.0	3.9	13.2
McAllen-Pharr-Edinburg	112,422	129,092	127,527	14.8	-.01	13.4
El Paso	89,555	136,993	161,847	53.0	18.1	80.7

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

In Corpus Christi the Spanish surnamed population increased by 38 percent during the decade of the 1950's, then hardly grew at all in the next decade.

In El Paso and San Antonio the pattern was the same. The Spanish surnamed population increased during the 1950's, and then the growth rate fell substantially the next decade. However, in each decade the increase was higher in El Paso and San Antonio than in the other areas.

If the Spanish surnamed population is more or less stabilizing in these areas, then where is it growing? The answer is in the same areas where the rest of the population is increasing its concentration, namely the eastern half of the State, especially in the Houston, Dallas and Fort Worth metropolitan areas. The growth of the Spanish surnamed population in these areas is shown in Table 20. In the Houston metropolitan area in 1950 there were less than 50,000 Spanish surnamed. In 1970 there were over 155,000, representing a 226 percent increase in 20 years. In 1950, Houston ranked sixth in size of Spanish surnamed population. In 1970 it ranked third, exceeded in size only by San Antonio and El Paso.

TABLE 20

Growth of the Spanish Surnamed Population in Metropolitan Areas of Houston, Dallas and Fort Worth, 1950-1970

	Population Size			Percent Gain		
	1950	1960	1970	1950-60	1960-70	1950-70
Houston	47,955	90,157	156,130	88.0	73.1	225.5
Dallas	14,430	32,741	70,316	126.9	114.7	387.3
Fort Worth	8,552	19,373	31,804	126.5	64.2	271.8

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

The Fort Worth area underwent a similar experience. The number of Spanish surnamed in Fort Worth more than doubled during the 1950's. In the 1960's it increased by 64 percent. By 1970 the number of Spanish surnamed had increased by 272 percent over its 1950 size.

In Dallas the Spanish surnamed population numbered less than 15,000 in 1950. It doubled in each decade thereafter and by 1970 had increased 387 percent over its 1950 size. This represents an average annual increase of slightly over 19 percent.

But the eastern half of the State was not the only area that was experiencing rapid growth in the size of the Spanish surnamed population. There were areas in West Texas and in the Panhandle which were also growing rapidly. Admittedly, these areas are not as heavily populated as other areas of the State, but the rate of increase in the number of Spanish surnamed is no less dramatic. In the Midland and Odessa areas, for example, there were less than 1,600 Spanish surnamed people in 1950 in each area. During the decade of the 1950's these populations more than doubled, with the population in Odessa actually more than tripling. In the decade of the 1960's the rate of growth fell considerably, but by 1970 Midland had experienced a 220 percent increase over the number of Spanish surnamed that lived there in 1950, while Odessa's Spanish surnamed population increased by 509 percent over its 1950 size.

The Lubbock metropolitan area also experienced a rapid increase. In 1950 the Spanish surnamed numbered less than 7,000. By 1970 there were approximately 25,000 Spanish surnamed in the area representing a 274 percent increase during the 20 years.

The Amarillo metropolitan area had a similar experience. The approximately 1,800 Spanish surnamed in 1950 doubled in size by 1960 and by 1970 numbered approximately 6,500 people, a 254 percent increase since 1950.

The majority of the Black population in Texas is concentrated in the eastern part of the State in ten metropolitan areas (see Table 21). In 1950 approximately 49 percent of the State's Black population lived in these areas. Twenty years later this percentage had increased to 64 percent.

TABLE 21

Growth of the Black Population in Selected Metropolitan Areas of Texas, 1950-1970

	Population Size			Percent Gain		
	1950	1960	1970	1950-60	1960-70	1950-70
Houston	175,871	277,049	382,382	57.5	38.0	117.4
Dallas	110,471	167,518	247,181	51.6	47.6	112.4
Fort Worth	41,435	60,694	82,514	46.5	36.0	99.1
Beaumont-Port Arthur-Orange	48,509	63,130	67,582	30.1	7.1	39.3
Galveston-Texas City	23,712	29,846	33,314	25.9	11.6	40.5
Waco	22,329	24,036	23,799	7.6	-1.0	6.5
Tyler	22,291	23,341	23,445	4.7	.44	5.2
Texarkana (Texas portion)	15,184	14,364	14,730	-.06	2.5	-.03
Sherman-Denison	6,187	6,421	6,608	3.8	3.0	6.8
Bryan-College Station	9,192	9,340	9,341	1.6	0.0	1.6

Source: U. S. Bureau of the Census, U. S. Census of Population: 1950, 1960, 1970.

As already stated, a substantial number of Blacks in East Texas live in either Houston, Dallas, or Fort Worth. Houston has the largest single concentration of Blacks in the State, followed by Dallas and Fort Worth. In 1950 Houston had 18 percent of all the Blacks in the State, and by 1970 this had increased to 27 percent, representing over one-quarter of all the Blacks in the State. During the years 1950 to 1970 the Black population in Houston and Dallas more than doubled, while in Fort Worth it just fell short of doubling.

Outside of the Houston, Dallas and Fort Worth centers, the size of the Black population was small in comparison and remained relatively stable. In Waco and Tyler, for example, the size of the Black population remained between 22,000 and 24,000 people from 1950 to 1970. This same pattern of stability existed in Sherman-Denison, Bryan-College Station, and the Texas portion of Texarkana. Only in the Beaumont-Port Arthur-Orange and Galveston-Texas City metropolitan areas did the Black population have a noticeable increase in size, and even here it was low in comparison to the three big centers of Houston, Dallas and Fort Worth.

Like the Spanish surnamed, there were some areas in West Texas where the small population of Blacks increased rapidly during the 1950's and then tapered off somewhat in the next decade. Midland, for example, almost doubled its 2,000 plus Black population between 1950 and 1960. Between 1960 and 1970, Blacks increased only by three percent. Odessa is another example of this pattern. The Blacks more than doubled in size in the 1950's, growing to around 4,800 people in 1960. The size decreased slightly during the next decade. Amarillo, located in the Panhandle, has a similar experience. Its

population of approximately 3,600 Blacks doubled during the 1950's and then declined by 13 percent in the 1960's.

One of the more interesting population phenomenons to occur in recent years has been the increasing concentration of ethnic and racial populations in the central cities of the metropolitan areas and the corresponding "white flight to the suburbs" of the Anglo population.

TABLE 22

Percent of Metropolitan Population* Living In Central Cities of Texas by Ethnic Group, 1950-1970

Group	Year		
	1950	1960	1970
Anglo	72.0	72.5	59.5
Spanish Surnamed	81.5	83.7	77.3
Black	82.0	84.1	84.5
Total	74.0	72.6	65.4

*Calculations based on actual size of metropolitan area at each time period shown.

Source: See Table 21.

In Texas, as shown in Table 22, the Spanish surnamed and Black populations have been proportionately more concentrated in the central cities than the Anglo population, at least since 1950. Also, it appears that the white flight to the suburbs did not really begin until the 1960's. Sixty percent of the Anglo population in the metropolitan areas lived in the central cities in 1970 in comparison to approximately 72 percent in 1950 and 1960.

Another way of viewing the shifting population within the metropolitan areas is to consider the growth rates both in and outside the central cities. These estimates are shown in Table 23.

TABLE 23

Growth of Metropolitan Population In and Outside of Central Cities of Texas by Ethnic Group, 1950-1970

	Inside Central Cities Population Size			Percent Gain		
	1950	1960	1970	1950-60	1960-70	1950-70
Anglo	2,066,808	3,193,836	3,487,775	54.5	9.2	68.7
Spanish Surnamed	468,162	789,928	970,644	68.7	22.8	107.3
Black	400,438	663,228	892,650	65.6	34.6	122.9
Total	3,011,366	4,516,573	5,393,019	50.0	19.4	79.1
	Outside Central Cities Population Size			Percent Gain		
	1950	1960	1970	1950-60	1960-70	1950-70
Anglo	1,394,320	1,597,393	2,373,342	14.5	48.5	70.2
Spanish Surnamed	251,520	241,972	284,567	-.04	17.6	13.1
Black	176,540	157,756	163,119	-.11	3.3	-.08
Total	1,752,777	2,139,987	2,841,439	22.0	32.7	62.1

Source: See Table 21.

Inside the central cities both the Spanish surnamed and Black population more than doubled in size while the Anglo population was increasing by 68 percent. During the 1960's when all three groups experienced a slowing down of their growth rates, the Anglo population increase was less than 10 percent.

In the areas outside the central cities the pattern is reversed. The Anglo population experienced the highest rates of increase while the Black and Spanish surnamed population experienced the lowest rates. The Black population actually shows a slight loss in size for the 20 year period. The Anglo population was growing just as fast in these areas as they were in

the inner cities. During the 1960's while the increase was less than 10 percent for the Anglo population in the inner cities the gain was approximately 49 percent in areas outside the central cities.

Summary

Each of the three major ethnic groups in Texas experienced an absolute increase in size during the period 1950-1970, with the Spanish surnamed having the largest increase and Anglos and Blacks having the least increase. Despite this increase, however, their sizes relative to one another remained virtually unchanged. Anglos made up at least 70 percent of the population throughout the 20 years, while the Spanish surnamed and Black populations made up approximately 14 percent and 12 percent respectively.

The composition of the Spanish surnamed group is more diverse in comparison to the other two groups. Approximately 85 percent of the Spanish surnamed are of Mexican origin. Also, because of continuous immigration from Mexico, there are always three generations within the Spanish surnamed: the foreign born, children of the foreign born (or mixed foreign and native born) and children of the native born. The evidence available, however, indicates that the foreign born and the children of the foreign born are decreasing relative to the native born.

The one single factor which accounted for most of the growth of the three groups and the changes in their growth rates was the fluctuations in the number of births. Migration was also an important factor affecting the size of the Spanish surnamed, but it was of minimal consequence for the Black and Anglo populations.

Each of the populations experienced an increase in the number of births during the 1950's followed by a decline in the 1960's. Throughout this period, the birth rate of the Spanish surnamed remained the highest, while Blacks had the second highest and Anglos the lowest birth rate. Also, the birth rates of Black and Spanish surnamed women show signs of converging. The indications are that the birth rate of the Spanish surnamed and Anglo population will continue to decline in the 1970's, while the birth rate of Blacks may begin to increase. If this does occur, the converging trend between the Spanish surnamed and Black birth rates will become more evident.

Determining the extent to which migration was affecting the size of the Spanish surnamed and Anglo populations proved to be hazardous due to the lack of information and the flaws in the information that is available. Nevertheless, the calculations shown in this report estimate that legal immigration from Mexico accounted for at least one-third of the growth of the Spanish surnamed population each decade. In addition to this, the Spanish surnamed also experienced a net out-migration of people from the State in both decades, with the number of out-migrants being four times as high in the 1960's as it was in the 1950's. The effect of this net out-migration on the size of Spanish surnamed population can be seen if we consider what the percent gain would have been if out-migration had not occurred. During the 1950's, for example, if the estimated 48,920 net out-migrants had not left the State, the Spanish surnamed population would have grown by 43 percent by 1960 instead of 38 percent. In 1960, the gain would have been more impressive. If the estimated 209,550 people had not migrated out, the gain from 1960 to 1970 would have been 32 percent instead of 17 percent, almost twice as much.

But even though immigration from Mexico and the net out-migration of people from Texas appear to affect the size of the Spanish surnamed population more than the other two groups, the estimates should be taken with caution because of the faulty data.

The Black population also experienced a net out-migration of people during the 50's and 60's, but its effect upon the size of their population was minimal. Slightly over 10,000 Blacks left the State during the 20 years. If this had not occurred, the difference in percent gain would have been less than one percent.

While Blacks and the Spanish surnamed were leaving the State, Anglos were moving in. It was estimated that net in-migration of Anglos accounted for at least 11 percent of their growth in each decade. However, since the data used to calculate this in-migration was derived from the information on the Spanish surnamed, these estimates could also prove to be erroneous.

Throughout the 1950's and 1960's, the population of Texas was concentrating more and more in the metropolitan areas of the State, especially in the Houston, Dallas and Fort Worth areas. During the 1950's, there was also a distinct growth in the western half of the State as the cities of Abilene, Midland and Odessa grew to metropolitan size, and the existing metropolitan cities of Amarillo, Lubbock, San Angelo and El Paso gained in size. During the 1960's the growth in the western half of the State declined considerably as the counties around the metropolitan areas began to lose population and the population in the cities began to stabilize.

The metropolitan status of Abilene, Midland and Odessa came about largely as a result of an increase in the number of Anglos. The Spanish surnamed and Black populations have never existed in large numbers in these areas even though their small populations also grew rapidly during the 1950's.

In the areas of the State where the Spanish surnamed and Black populations are heavily concentrated, their sizes are showing signs of decline or stabilization. In Laredo and Corpus Christi, for example, the Spanish surnamed population hardly increased in size during the 1960's. The same is true for the Brownsville-Harlingen-San Benito and McAllen-Pharr-Edinburg areas. They actually show a population loss during the 1960's. Even in the 1950's when the population was experiencing a high birth rate, these areas were not growing very fast due to the out-migration of people. In the two cities which have the largest concentration of Spanish surnamed people, El Paso and San Antonio, there was impressive gain in size during the 1950's. In the 1960's, however, the increase dropped considerably.

The Black population in East Texas was undergoing the same type of experience except that while the size of the Black population was declining in some areas of East Texas, it was growing in other East Texas areas, primarily Houston, Dallas and Fort Worth. The metropolitan areas of Waco, Tyler, Beaumont-Port Arthur-Orange, Galveston-Texas City and the Texas portion of Texarkana all experienced a slowing down in the growth of their Black populations. Houston, Dallas and Fort Worth on the other hand more than doubled the size of their Black population during the 1950 to 1970 period.

The Black population was not the only group doubling its size in the Houston, Dallas and Fort Worth metropolitan areas. The Anglo population more than doubled in Houston while it increased 87 percent and 88 percent respectively in Dallas and Fort Worth. But neither the Black nor the Anglo population was growing as fast as the Spanish surnamed population in these metropolitan areas. From 1950 to 1970 the Spanish surnamed population grew

225 percent in Houston, 272 percent in Fort Worth and 387 percent in Dallas. In 1950, Houston ranked sixth in the State in terms of its Spanish surnamed population. By 1970 it ranked third. If this trend continues and the Black population continues to grow at its current pace, Houston should have a minority population approaching one and one-half million people by 1990. If the growth trends continue in Dallas, it should have a minority population numbering around 800,000 while in Fort Worth the minority population should number around 300,000.

Within the metropolitan areas the trend has been for the Anglo population to decrease proportionately in the central cities and to increase their proportion in the areas outside the central cities. Indicative of this shift is the growth rate in these areas for the two decades. During the 1950's, the Anglo population increased its size by 55 percent in the cities and 15 percent in the areas surrounding the cities. During the 1960's, the growth of the Anglo population in the cities fell considerably increasing by less than 10 percent. In the outer areas of the city, however, the Anglo population grew by 49 percent.

The Black and Spanish surnamed populations in comparison were hardly increasing their sizes in the areas outside the central city while their sizes inside the central cities were more than doubling. In the city of Houston, for example, the Spanish surnamed grew by 222 percent from 1950 to 1970 while the Black population increased by 154 percent. Fort Worth had a similar experience with the Spanish surnamed increasing by 210 percent and the Black population increasing by 112 percent. The highest rate of increase

for both groups occurred in the city of Dallas. For the twenty year period the Black population grew at an average increase of 14 percent a year yielding a 269 percent gain by 1970. The Spanish surnamed grew at even a faster rate, averaging a 23 percent increase per year. This rate lead to a 468 percent gain in their size from 1950 to 1970.

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